

ABSTRACT OF THE DISCLOSURE

A fuel cell system that includes fuel processing components, such as a reformer and shift converter, for 5 converting an organic fuel to hydrogen, is shut-down by disconnecting the fuel cell from its load and purging the fuel processing components of residual hydrogen with a flow of air. The purge air may be forced through the components in series or in parallel, using a blower; or, 10 the purge air may be allowed to enter the components through a low inlet, whereupon the air rises through the components by natural circulation and exits through a high outlet, along with the residual hydrogen.